



## Department of Environmental Protection

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Virginia B. Wetherell Secretary

Twin Towers Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

May 7, 1998

Mr. Wayne Hansel
Code 18B7
Southern Division
Naval Facilities Engineering Command
P.O. Box 190010
North Charleston, South Carolina 29419-0068

RE: Final Draft Site Screening Report, Study Area 2

NTC Orlando

Dear Mr. Hansel:

I have completed the review of the above referenced document dated April 1998 (received April 23, 1998). Based upon the comments in the attached memorandum from David Grabka, the conclusions and recommendations at Study Area 2 will need to be evaluated further at our next Orlando Partnering Team meeting in May.

If I can be of any further assistance with this matter, please contact me at (904) 921-9989.

John W. Mitchell

Remedial Project Manager

cc: Lt. Gary Whipple, NTC Orlando Barbara Nwokike, Navy SouthDiv Nancy Rodriguez, USEPA Region 4

John Kaiser, ABB, Orlando

Steve McCoy, Brown & Root, Oak Ridge Robert Cohose, Bechtel, Knoxville Bill Bostwick, FDEP Central District

Tony Ettore, OGC/Trustee File

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## Memorandum

## Florida Department of **Environmental Protection**

TO:

John Mitchell, E.S. III, Remedial Project Manager

THROUGH:

Tim Bahr, P.G. Supervisor, Technical Review Section 3

FROM:

David P. Grabka, E.S. I, Technical Review Section

DATE:

May 7, 1998

**SUBJECT:** 

Final Draft, Base Realignment and Closure, Environmental Site Screening

Report, Study Area 2, Herndon Annex, Naval Training Center Orlando,

Florida, April 1998

I have completed my review of the Environmental Site Screening Report for Study Area 2, Herndon Annex, prepared by ABB Environmental Services, Inc., and have the following comments:

- (1) I do not agree that contaminant concentrations detected in surface soils do not justify additional delineation or remediation. Contaminant concentrations detected in surface soils will need to be addressed in some fashion. While only one sample had concentrations above Florida SCG's, that sample is a composite of soil collected from five discreet areas within a one acre area.
- (2) The source of contaminants detected in the surficial aquifer under Herndon Annex and the Azalea Park Neighborhood is still undetermined. However, based upon DPT data collected, it would appear an off-site source, such as the alleged Fire Training Areas, is less likely than an on-site source. Possible on-site sources were former landfilling activities and former fueling activities at aircraft parking aprons.
- (3) Groundwater flow at this site appears quite complex. Vertical hydraulic gradients, both up and down, were detected across the site. Benzene was detected during DPT screening at all depths of the surficial aquifer, but mainly at depths greater than 40 feet below land surface. It does not appear all areas where benzene was detected during DPT screening were confirmed with permanent monitoring wells.
- (4) The highest concentration of benzene detected (200 µg/l) was at DPT sampling location 02Q022 at a depth of 61 feet below land surface. Piezometers installed immediately adjacent to that location, 02PZ03 and 02PZ04, revealed a strong upward hydraulic gradient during water level measurements taken on November 11, 1996 and February 19, 1998. As benzene concentrations in DPT screening locations upgradient of that location were much lower, one may suppose that the benzene being detected is upwelling from deeper down in the Hawthorn Formation. As there is no monitoring well cluster located in this area, an interim measure to

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MEMORANDUM
Final Draft Environmental Site Screening Report
Study Area 2, Herndon Annex
NTC Orlando
Page Two
May 7, 1998

confirm the DPT data may be to sample piezometers 02PZ03 and 02PZ04 and analyze for VOCs and BTEX by EPA Methods 601 and 602.

- (5) I am not confident that the Natural Attenuation criteria of 62-770, Florida Administrative Code, can be met if this site is investigated and remediated under that rule. Vertical hydraulic gradients at the site are pronounced, the benzene contaminant plume extends off the property, and assuming the contamination detected has been present for many years, it would appear unlikely for contaminant levels to drop to No Further Action levels within five years or less.
- (6) Installation of additional permanent monitoring wells, especially in the deep portion of the surficial aquifer, may be necessary to determine remedial options or for remedial design.
- (7) Groundwater monitoring is an acceptable interim measure until a decision is made on whether to further investigate the site or to address the site with the information currently available, mainly DPT screening data. It is recommended that water level elevations from all monitoring wells and piezometers be taken before each sampling event.
- (8) I cannot concur at this time to recategorize Study Area 2 as 2/Blue. While all contaminants detected in monitoring wells at levels in excess of Florida Groundwater Guidance Concentrations (FGGCs) appear to be petroleum related, there were traces of VOCs detected in some wells. Also, DPT screening data showed FGGCs exceedances for four VOCs. As the preponderance of information collected at the site to date is DPT screening data, I do not feel VOCs can be entirely disregarded.